CHIRON TECHNOLOGIES CENTER FOR GENE THERAPY

A Phase II, Randomized, Double Blind Placebo Controlled Study of Combination Drug Antiretroviral Therapy to Include a Reverse Transcriptase Inhibitor and a Protease Inhibitor Plus HIV-IT (V) or Placebo in HIV Patients with CD4 Counts Greater Than or Equal to 100, and HIV RNA Greater Than or Equal to 1,000, but Less Than or Equal to 10,000

Lay Summary

BACKROUND

Human Immunodeficiency Virus-ImmunoTherapeutic (vector) [HIV-IT (V)], is a non-replicating murine retroviral vector encoding the HIV IIIb strain envelope and rev genes. The production process which places the HIV-IT gene plasmid on a separate plasmid from the murine retroviral packaging proteins results in a retroviral vector that is not able to replicate. The HIV-IT (V) vector will transduce cells and lead to intracelluar production of the HIV proteins and enter the HLA class I antigen processing pathway. The presence of the HIV env/rev proteins expressed by HLA Class I on the surface of the cell will initiate the activation of CD8 cytotoxic T cells against the HIV env/rev proteins. Pre-clinical and Phase I studies have shown that intramuscular injections of HIV-IT induces a cytolytic T cell response against HIV.

Two phase II studies of HIV-IT (V) will be performed. In the first study, VHII-01, all patients have completed treatment and data analysis is underway. The results are expected by Decembber, 1997. This protocol was a multicenter, placebo controlled study of HIV-IT versus placebo in HIV patients with CD4 counts >100. HIV-IT treatment courses included 60 million CFU every two weeks for one month with the course repeated three times per year for two years. Patients were allowed to be on anti-retroviral chemotherapy prescribed by their physicians.

HIV-IT (V) has been well tolerated with minimal injection site reactions and no significant adverse events that could be attributed to study drug. An interim analysis of the VHII-01 study was performed and analysis by the Drug Safety Monitoring Board showed no bias in systemic or laboratory adverse events that could be attributed to study treatment with HIV-IT (V). Testing for replication competent retrovirus to evaluate the potential for replication of the retroviral